

MDEQ Dioxin Data Overview - Shiawassee and Saginaw River Watersheds

2004 EPA Great Lakes National Program Office Grant

February 09, 2006

MDEQ-WHMD
Allan Taylor



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Shiawassee River

Saginaw River

Upper Saginaw - non-navigational (Confluence/22.5 - 17.5 RM)

Mid Saginaw - navigational (17.5-4.7 RM)

Lower Saginaw - navigational (4.7 - Mouth/0)

Saginaw Bay

East Bay

West Bay

Distribution of Samples - 212 total samples from 116 stations

Floodplain - 115 Shiawassee-22%, Saginaw-68%, Bay-10%

Sediment - 97 Shiawassee-33%, Saginaw-45%, Bay-22%

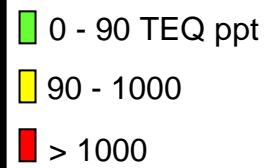


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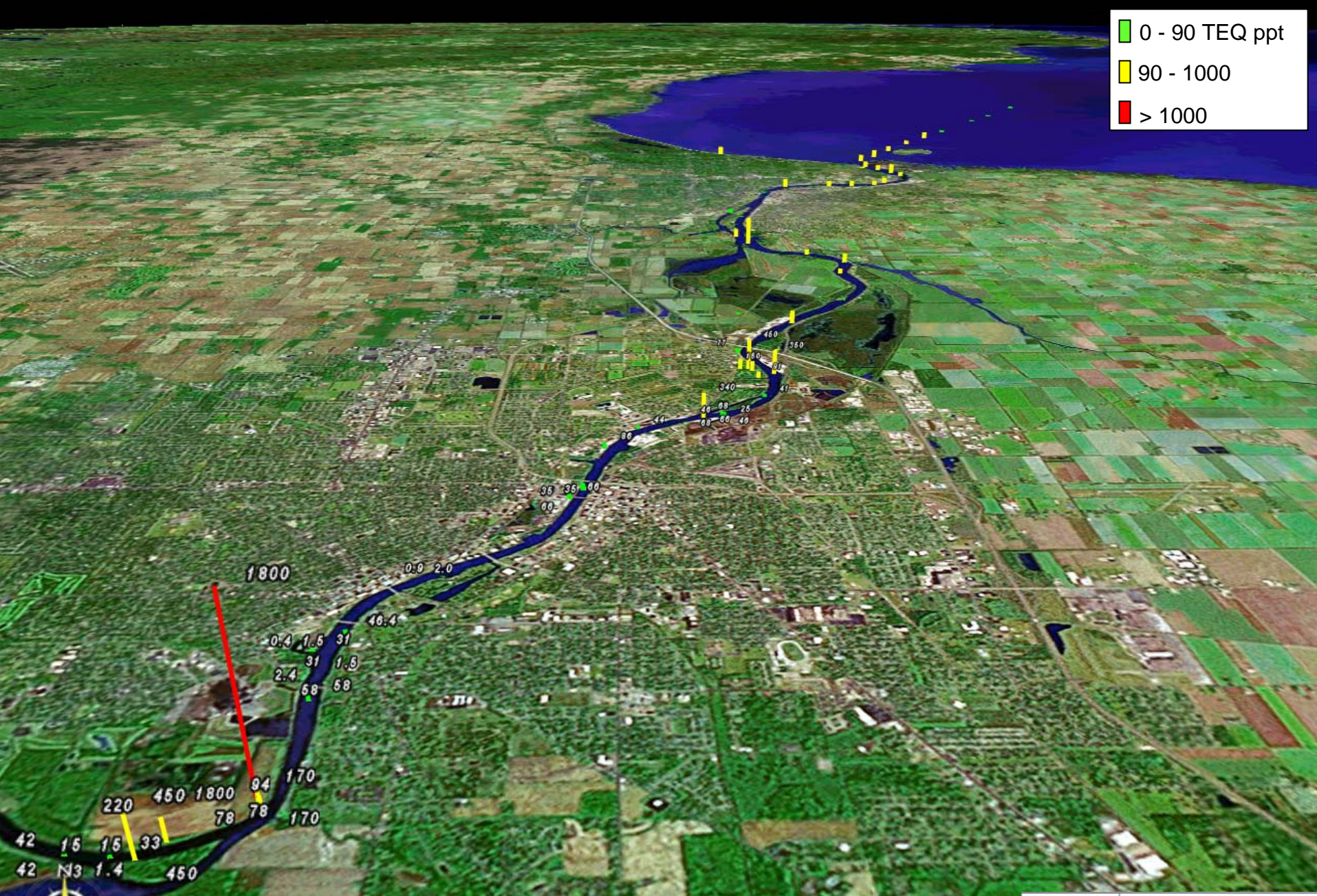
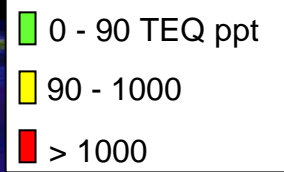
2004 MDEQ-WHMD Shiawassee River Floodplain and Sediment Data Results

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Pre 2004 MDEQ-WHMD Saginaw River
Sediment Data Results

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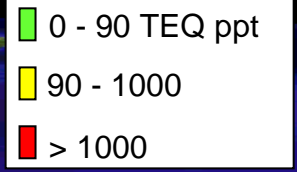
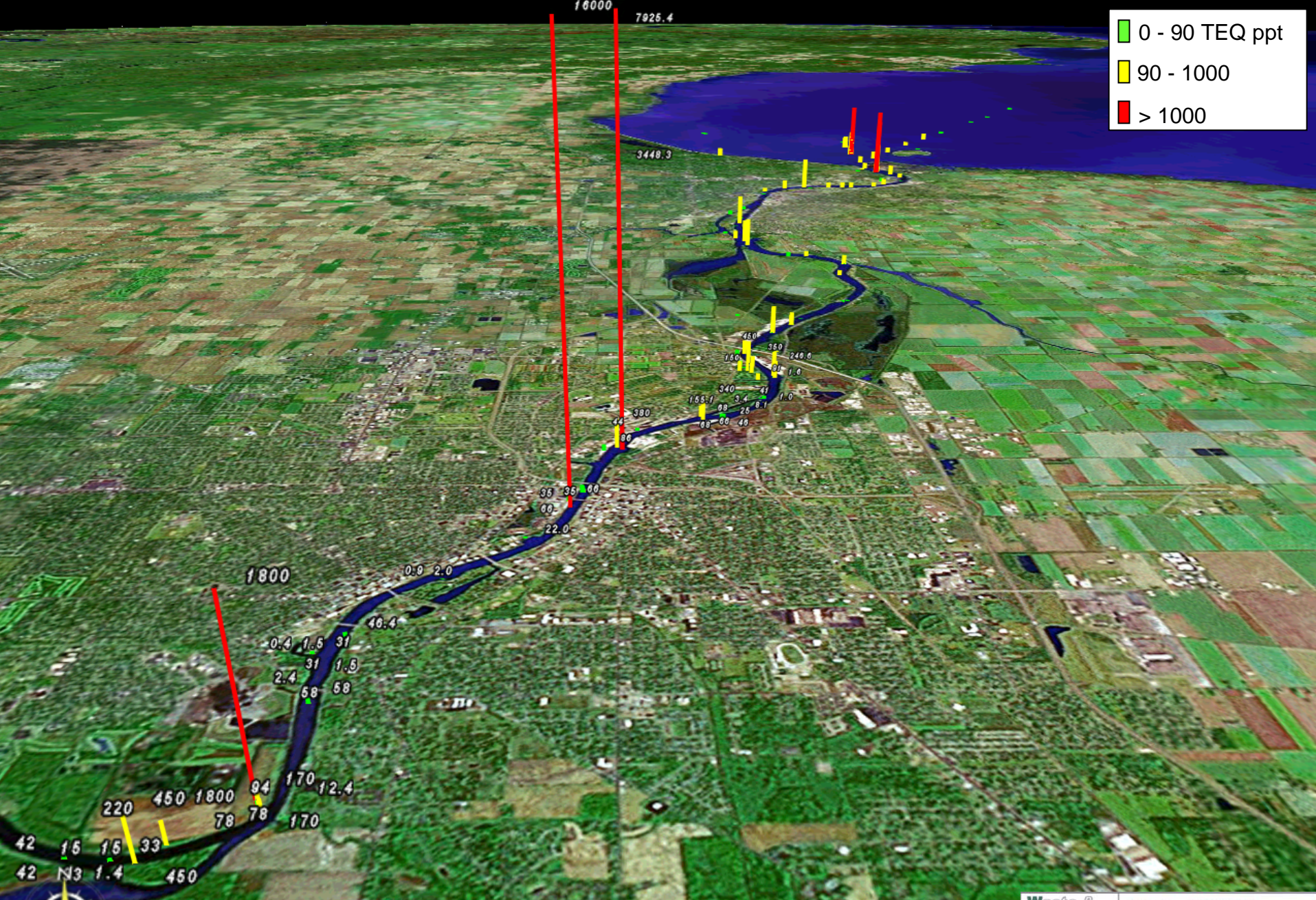
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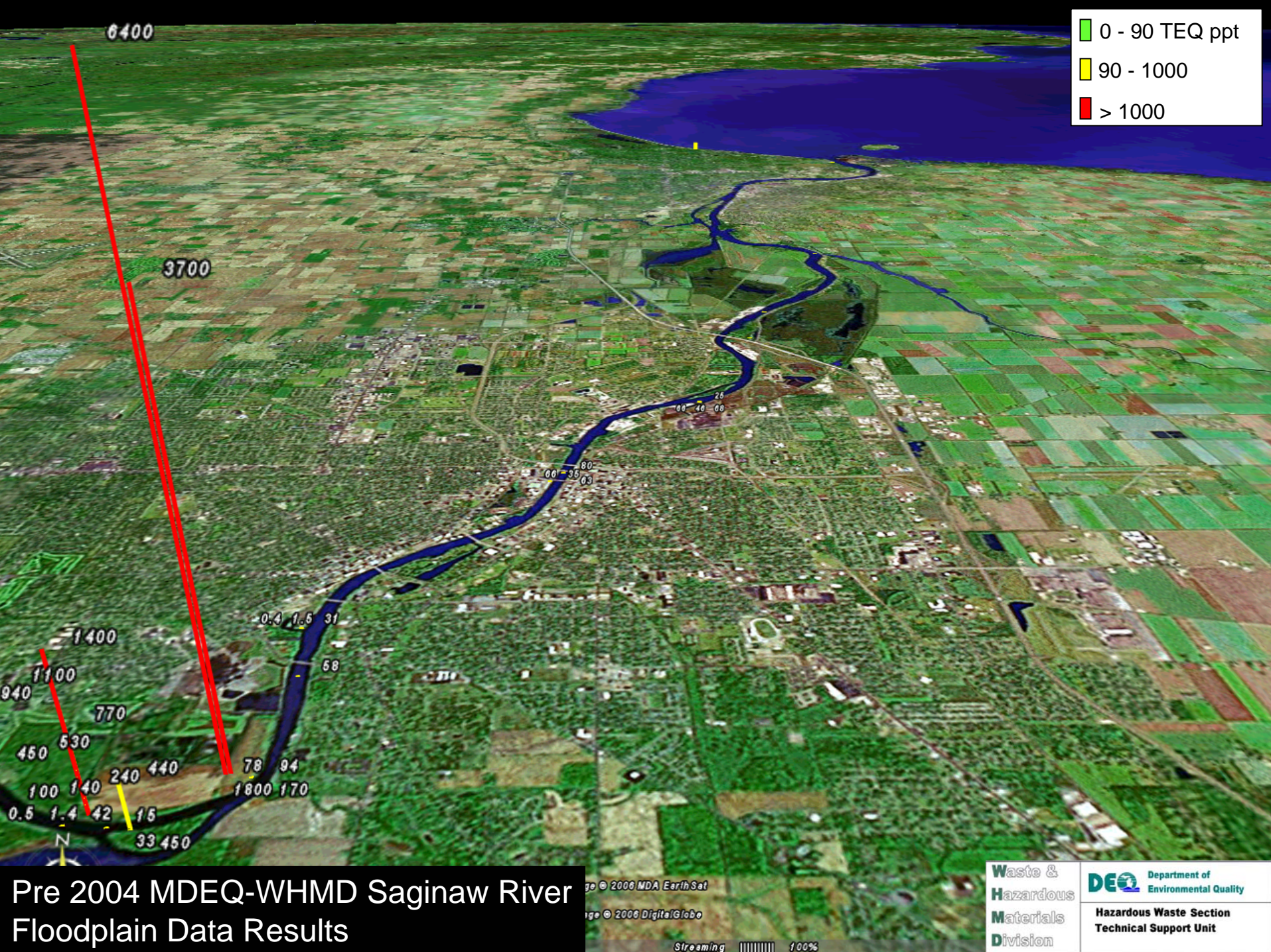
Post 2004 MDEQ-WHMD Saginaw River Sediment Data Results

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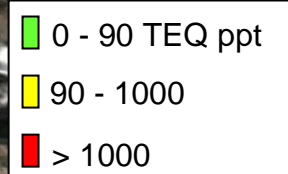
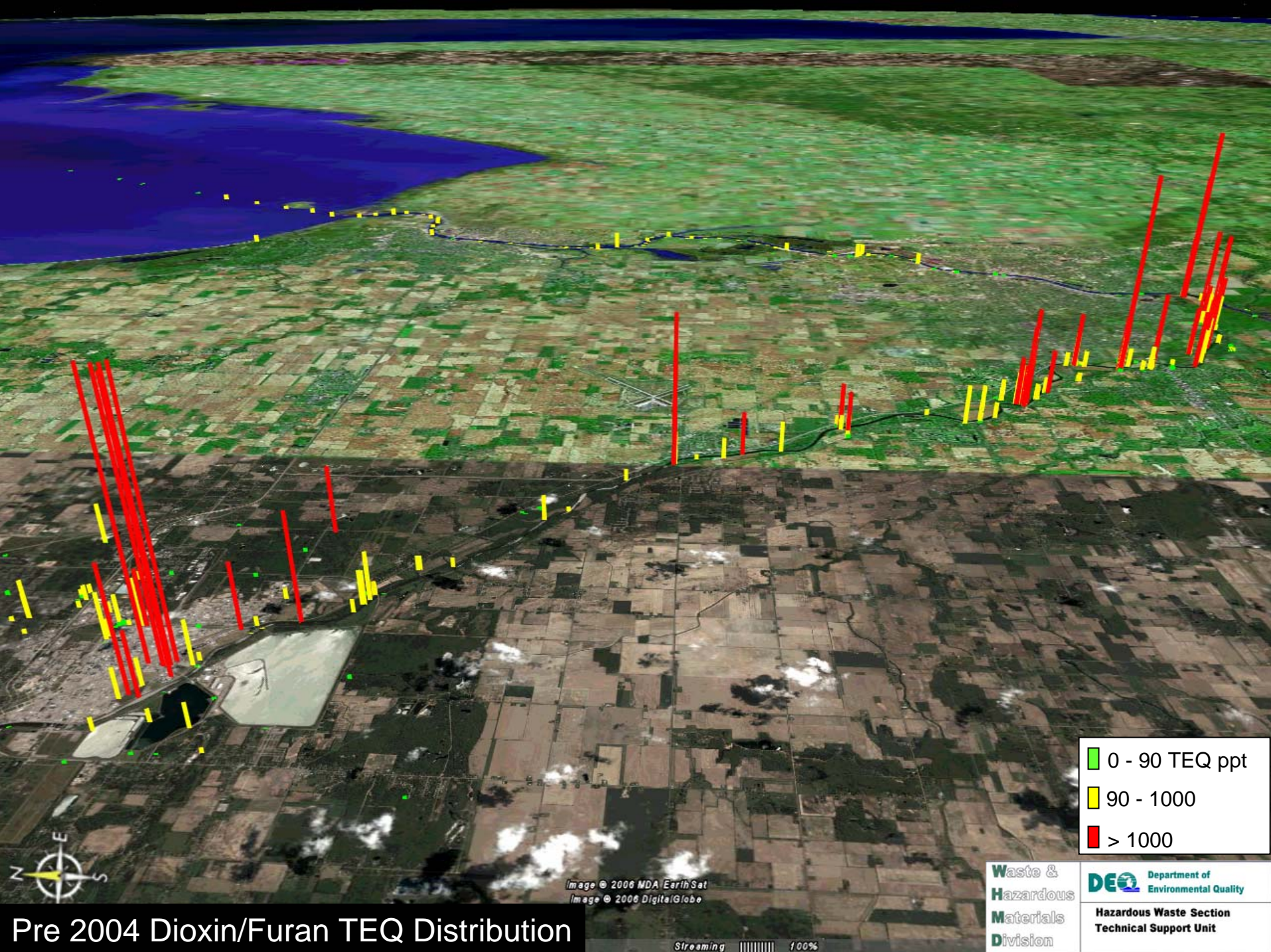
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Pre 2004 MDEQ-WHMD Saginaw River Floodplain Data Results



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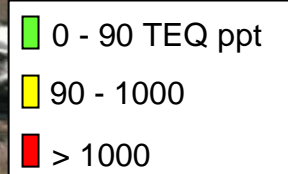
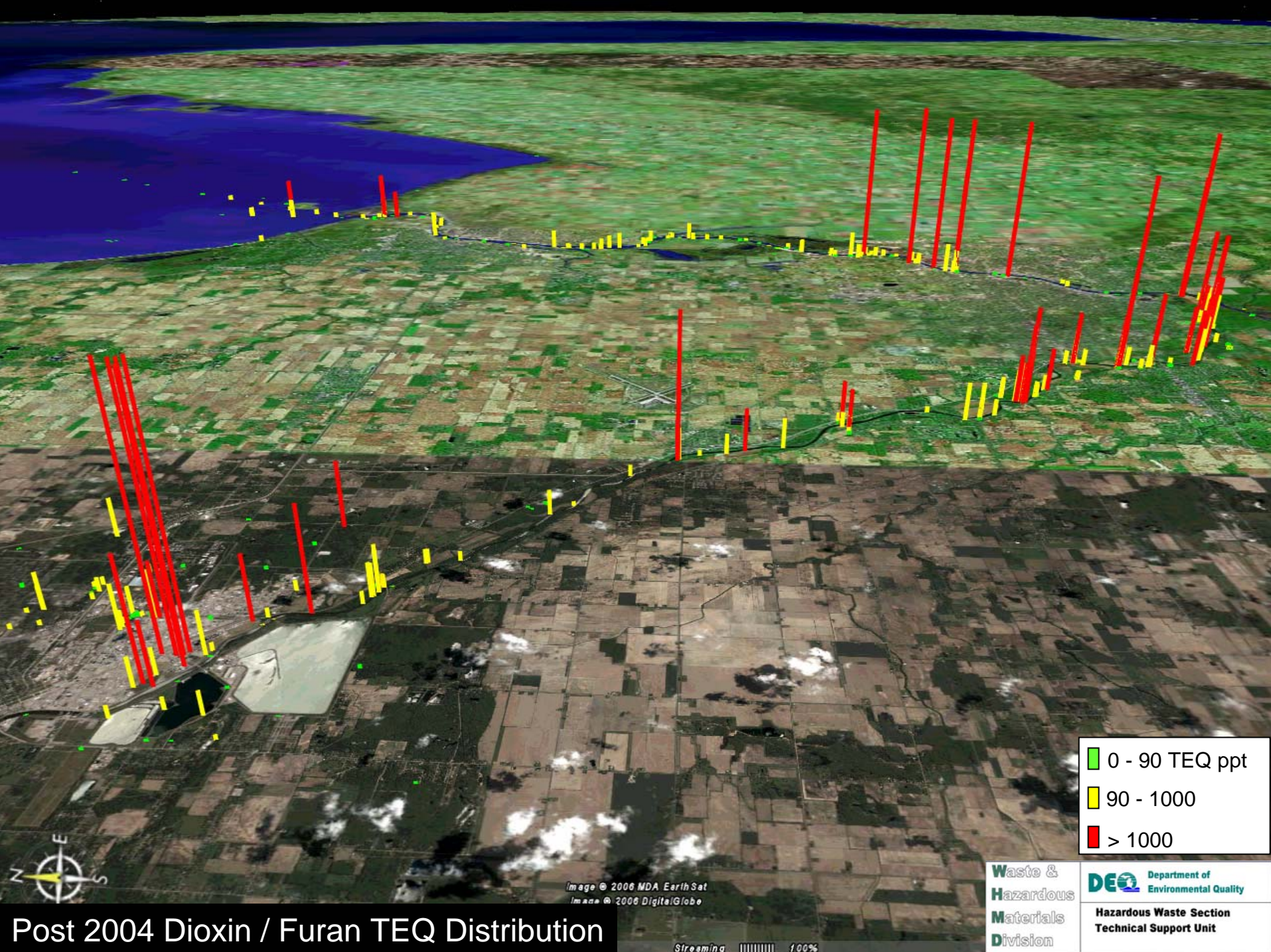
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Pre 2004 Dioxin/Furan TEQ Distribution



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Post 2004 Dioxin / Furan TEQ Distribution

PRELIMINARY CONCLUSIONS

- 1) The Shiawassee River is not a significant contributor of D/F to Saginaw.
- 2) The Saginaw River Floodplain is not as contaminated as the Tittabawassee River Floodplain.
- 3) The highest TEQ concentrations, (up to 16,000 ppt TEQ) were found in the Upper Saginaw River Sediments (non-navigational).
- 4) High levels (> 1000 ppt TEQ) were found in the Lower Saginaw River and west portion of Saginaw Bay at depth.

NEXT STEPS

- 1) Report due to EPA-GLNPO - Spring 2006.
- 2) Incorporate Dow Studies and Agency Data into Google Earth.

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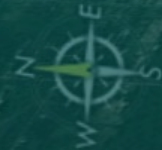


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